

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in this application:

LISTING OF CLAIMS:

Claims 1 to 15. (Canceled).

16. (Currently Amended) ~~[[The]]~~ A sensor as recited in claim 15, for measuring a physical property of an oxygen concentration or a temperature in an exhaust gas of an internal combustion engine in a motor vehicle, comprising:

a housing;

a measuring element accommodated in the housing, the measuring element having an end section that protrudes from the housing;

a connector plug mounted on the end section; and

a housing shell which covers the end section and the connector plug with a radial clearance, the housing shell having a first shell end that is attached to the housing, and a second shell end that is sealed;

wherein a free space present inside the housing shell is completely filled with a material;

wherein the material is filled in as a bulk material;

wherein the material is a non-conductive, inorganic material in the form of a granulate; and

wherein the material is one of quartz sand or granulated corundum.

17. (Currently Amended) The sensor as recited in claim ~~[[13]]~~ 16, wherein~~[[,]]~~ after the material is filled in, a molded body is introduced into the housing shell to seal the second shell end of the housing shell facing away from the housing, connecting cables connected to the connector plug being passed through the molded body.

18. (Previously Presented) The sensor as recited in claim 17, wherein the housing shell and the molded body are radially pressed together.

19. (Currently Amended) ~~[[The]]~~ A sensor as recited in claim 13, for measuring a physical property of an oxygen concentration or a temperature in an exhaust gas of an internal combustion engine in a motor vehicle, comprising:

a housing;

a measuring element accommodated in the housing, the measuring element having an end section that protrudes from the housing;
a connector plug mounted on the end section; and
a housing shell which covers the end section and the connector plug with a radial clearance, the housing shell having a first shell end that is attached to the housing, and a second shell end that is sealed;
wherein a free space present inside the housing shell is completely filled with a material; and
wherein the material is a temperature-resistant, porous foam.

20. (Previously Presented) The sensor as recited in claim 19, wherein orthosilicic acid (H_4SiO_4) is used as a foam-forming material, the molecules of which assume a colloidal structure when water is split off and silicon dioxide chain molecules are formed.

21. (Currently Amended) The sensor as recited in claim 20, wherein the second shell end of the housing shell facing away from the housing is occluded by a molded body, through which [[the]] connecting cables connected to the connector plug are passed, and an upper radial borehole, which is situated above the connector plug, and a lower radial borehole, which is situated below the connector plug and is used for introducing the foam-forming material, are positioned in the housing shell.

22. (Previously Presented) The sensor as recited in claim 21, wherein the lower borehole is sealed, after the introduction of the foam-forming material.

23. (Previously Presented) The sensor as recited in claim 22, wherein the lower borehole is welded shut.

24. (Previously Presented) The sensor as recited in claim 21, wherein a diameter of the lower borehole is approximately 1 mm to 3 mm.

25. (Currently Amended) The sensor as recited in claim [[13]] 16, wherein the housing shell is attached in a gas-tight manner to the housing.

26. (Previously Presented) The sensor as recited in claim 25, wherein a shell edge of the housing shell is welded to the housing.